

REMARKS

Claims 1-4, 8-17 and 21-26 are pending in the present application, claims 5-7, 18-20 and 27-39 having been canceled by this amendment. Reconsideration in view of the following remarks is kindly requested

Summary of Multiple Telephonic Interviews

Initially, Applicants wish to thank Examiner Zewdu for his time and effort in multiple telephonic interviews conducted between Dec. 31, 2004 to January 5, 2005. Prior to discussion, Applicants' representative provided a proposed response points. The Examiner was receptive to Applicants' proposed claim amendments to claims 1 and 14 as to defining over the current art of record, but indicated that the amendments would raise new issues requiring further search and/or consideration. To expedite prosecution, the Examiner suggested filing an RCE.

Accordingly, Applicants have amended original claims 1 and 14 as discussed with the Examiner.

Allowable Subject Matter

Applicants acknowledge the Examiner's indication that claims 11 and 24 contain allowable subject matter. By this Amendment, Applicants have incorporated features from the allowable subject matter of claims 11 and 24 into independent claims 1 and 14 to overcome the art rejections.

REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 1, 2, 4, 14, 15, 17, 27, 28 and 30 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Fuji in view of Keskitalo, and further in view of Russell. Applicant respectfully traverses this art grounds of rejection.

Initially, claims 27, 28 and 30 have been canceled, the rejection as pertaining to these claims is now moot.

By this amendment, Applicants have amended claims 1 and 14 to include allowable subject matter indicated in claims 11 and 24. Accordingly, Applicants submit

that none of Fuji, Keskitalo or Russell teach or suggest a base station servicing a macrocell and at least one microcell, comprising:

at least one steerable N-dimensional ($N \geq 2$) antenna array . . . including at least two antenna elements and an N-dimensional digital filter for receiving inputs from said at least two antenna elements and processing the inputs to produce a resultant output beam, wherein at least one of the inputs and outputs are weighted using filter tap weighting coefficients of a plurality of filter taps to steer the resultant output beam, the weighting coefficients of a given filter tap determined as a function of an antenna element spacing value between antenna elements, a look direction of the resultant output beam and a wavelength of an incident signal; as recited in claim 1, and as somewhat similarly recited in method claim 14 (underlining for emphasis). Support for this may be found on page 6, line 5 to page 7, line 3 of the specification.

None of these references describe determining weighting coefficients of a plurality of filter taps to steer the resultant output beam, in which the weight coefficients for a given filter tap are determined as a function of an antenna element spacing value between antenna elements, a look direction of the resultant output beam and a wavelength of an incident signal. For at least this reason, withdrawal of the rejection is kindly requested.

Claims 3, 8, 12, 13, 16, 21, 25, 26, 34, 38 and 39 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Fujii in view of Keskitalo and Russell as applied to claims 1, 14, and 27, and further in view of Raith.

Claims 34, 38 and 39 have been canceled, the rejection as pertaining to these claims is now moot. By this amendment, Applicants submit that pending dependent claims 3, 8, 12, 13, 16, 21, 25 and 26 are allowable at least for the reasons set forth above regarding their corresponding independent claim, since Raith is applied for limited teachings unrelated to the determination of weighting coefficients as a function of an antenna element spacing value between antenna elements, a look direction of the resultant output beam and a wavelength of an incident signal. Withdrawal of the rejection is kindly requested.

Claims 5-6, 10, 18-19, 23, 31-32, and 36 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Fujii in view of Keskitalo and Russell as applied to claims 1, 14 and 27, and further in view of Velazquez. Applicant respectfully traverses.

Claims 5, 6, 18, 19, 31, 32 and 36 have been canceled, the rejection as pertaining to these claims is now moot. By this amendment, Applicants submit that pending dependent claims 10 and 23 are allowable at least for the reasons set forth above regarding their corresponding independent claim, since Velaquez is applied for limited teachings unrelated to the determination of weighting coefficients as a function of an antenna element spacing value between antenna elements, a look direction of the resultant output beam and a wavelength of an incident signal. Withdrawal of the rejection is kindly requested.

Claims 7, 9, 20, 22, 33, and 35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Fujii in view of Keskitalo, Russell, and Velazquez as applied to claims 5-6, 10, 18-19, 23, 31-32 and 36, and further in view of Searle. Applicant respectfully traverses.

Claims 7, 20, 33 and 35 have been canceled, the rejection as pertaining to these claims is now moot. By this amendment, Applicants submit that pending dependent claims 9 and 22 are allowable at least for the reasons set forth above regarding their corresponding independent claim, since Searle is applied for teachings of weighting the outputs of a tapped delay line (Searle, col. 2, lines 41-55). Searle thus does not teach or suggest the determination of weighting coefficients as a function of an antenna element spacing value between antenna elements, a look direction of the resultant output beam and a wavelength of an incident signal. Withdrawal of the rejection is kindly requested.

CONCLUSION

In view of the above amendments and remarks, reconsideration of the rejections and allowance of each of claims 1-4, 8-17 and 21-26 is earnestly solicited.

Pursuant to 37 C.F.R. § 1.17 and § 1.136(a), Applicants respectfully petition for a two (2) month extension of time for filing a response in connection with the present application, and the required fee of \$450.00 is attached.

In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Matthew J. Lattig at (703) 668-8026 (direct) in the Washington, D.C. area, to discuss the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. 1.16 or under 37 C.F.R. 1.17; particularly, extension of time fees.

Respectfully submitted,

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